

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A pickup device of an apparatus for recording or reproducing information, by irradiation of a light beam, to and from a multi-layered recording medium having a plurality of recording layers laminated through spacer layers, wherein each of said spacer layers of the multi-layered recording medium has a thickness of 10 μm to 30 μm , the device comprising:

an illumination optical system including an objective lens for focusing a light beam onto any of said recording layers of said multi-layered recording medium; and

a detecting optical system including a photodetector for receiving and photoelectrically converting reflection light from said recording layer of said multi-layered recording medium through said objective lens; wherein said photodetector has a normalized detector size (B/β^2) of a size of 10 μm^2 to 50 μm^2 or lower based on a predetermined focus-servo capture range and interlayer crosstalk, and

wherein the normalized detector size (B/β^2) is given by an equation of

$$B/\beta^2 = L^2 / (f_c/f_{OB})^2$$

wherein L denotes a size of one side of the photodetector, f_c denotes a focal distance of the detecting optical system and f_{OB} denotes a focal distance of the objective lens, wherein said objective lens has a numerical aperture of 0.85 or greater.

Claims 2-6 (Canceled).

Claim 7 (Previously Presented): A pickup device according to claim 1, further comprising a detecting circuit connected to said photodetector, wherein said detecting circuit outputs signals with 3% or lower of a reproduced signal distortion.

Claim 8 (Canceled).